of head and length of stipe are easily seen. The dehiscence of the peridium is plain and the exposed mass of spores and capillitium appears dark in the photographs as in nature.

Marshall Ward gives a very complete description of the fungus and of his cultural experiments with it in Vol. 191 B of the Philosophical Transactions of the Royal Society of London for 1899. A brief description of the fungus may not be out of place:

Fructification rounded, stalked or sessile, 1 to 5 mm. in height; peridium whitish, dehiscing irregularly or in lobes; asci globoid, 8-spored, 10 to 14 μ by 14 to 22 μ; ascospores yellowish to hyaline, 4 to 5 μ by 7 to 9 μ.

The asci are very difficult to obtain in good condition when dissecting sporocarps which are mature or nearly so since they readily rupture and collapse after the dispersal of the ascospores.

B. T. DICKSON.

MACDONALD COLLEGE,
QUEBEC, CANADA.

A NEW AMANITA

This species is dedicated to the discoverer, Professor H. L. Wells, of the Sheffield Scientific School of Yale University, who has carefully studied it for several years. The accompanying description is drawn up from his ample field notes and photographs. Limited space forbids further discussion of this beautiful species here, but a more extended treatment will be prepared by Dr. Kelly and Mr. Krieger from notes and illustrations which I shall furnish them.

Venenarius Wellsii sp. nov.

Pileus globose to convex, at length expanded, becoming nearly plane, gregarious, 5 to 10 cm. broad when expanded; surface dry, salmon-colored, fading, especially after a rain, usually remaining more deeply colored on the disk, covered with exceedingly minute, yellowish-buff warts, mostly distributed irregularly in large patches; margin of young plant usually showing a very delicate, bright-yellow tomentum, not striate at first, but becoming distinctly so and showing the gills about halfway to the center, extending beyond the gills about 2 to 3 mm. forming a conspicuous sterile edge, colored like the pileus when viewed from below;

context easily separable from the cuticle, bright-yellow, becoming buff with age, at first mild to the taste, but with a lingering unpleasantness; lamellae free or adnexed, about 1 cm. wide to narrower at the stipe, moderately crowded, pale-dull-yellow, edges at first distinctly furfuraceous; spores ellipsoid, smooth, rounded at the ends, obliquely apiculate at the base, hyaline, uni-guttulate, $12 \times 7 \mu$; stipe tapering upward, bulbous at the base, stuffed or hollow, clothed with a very delicate, furfuraceous layer above the annulus, nearly glabrous below, pale-dull-yellow, 7 to 12 cm. long; annulus distinctly yellow, very delicate and loosely woven, thin, usually adhering to the margin of the cup in an appendiculate way after rupture, and leaving but a slight, delicate ring on the stipe; volva very delicate and loosely woven, distinctly yellow, sometimes pointed, but more often nearly flat at the base, soon glabrous, becoming less distinct with the growth of the plant.

Type collected in the township of Springfield, New Hampshire, about September 1, 1917. Known from several other localities in New Hampshire, also.

For the benefit of those following Saccardo, I add the combination **Amanita Wellsii.**

W. A. MURRILL.

CULTURES OF PUCCINIA CLEMATIDES (DC.) LAGERH. AND PUCCINIA IMPATIENTIS (SCHW.) ARTH.

During 1917 and 1918 the baneberries, *Actaea alba* (L.) Mill. and *A. rubra* (Ait.) Wild., which grew in a small wood near Ste. Anne de Bellevue, P. Q., were heavily infected with aecia. Field evidence suggested the connection of these aecia with *Puccinia Clematidis* (DC.) Lagerh. on *Hystrix patula* Moench. Roots of *Actaea rubra* were dug up in the fall and kept in a cool cellar during the winter. When placed in a greenhouse in the spring, they developed rapidly. Wintered telial material of *Puccinia Clematidis* on *Hystrix patula* was tested and found visible. Inoculations were made on three pots of *Actaea rubra* on April 28th. Aecia were first noticed on May 5 and a very heavy infection developed. One pot of plants kept as a check remained free from infection. The inoculations and observations connected with these cultures were made by Mr. P. I. Bryce, of the Biology Department of Macdonald College, who also made the